

Remarks

Claims 81-100 are pending and rejected. Applicants respectfully traverse the rejection and request allowance of claims 81-100.

Claims 81-100 stand rejected under 35 U.S.C. §103(a) over U.S. Patent 6,324,279 (Kalmanek). Claim 81 requires:

“A communication system comprising:

a signaling processor configured to receive and process signaling for a call to select a connection, a bandwidth rate, an encoding scheme, and a billing rate, to transfer a first message indicating the connection, the bandwidth rate, and the encoding scheme, and transfer a second message indicating the billing rate to an accounting system; and

an interworking unit configured to receive the first message and user communications for the call, and in response, to apply the encoding scheme to the user communications and transfer the user communications over the connection at the bandwidth rate.”

The applicant believes that the examiner has equated the gate controller 110 of Kalmanek to the signaling processor of claim 81. The applicant also believes that the examiner has equated the network edge device 120 (also called an ER) to the interworking unit of claim 81. The applicant also believes that the examiner has equated the messages sent from the telephony interface unit 170 (also called a BTI) to the gate controller 110 as the signaling received and processed by the signaling processor in claim 81. Applicant will base his arguments on this understanding.

Claim 81 requires a signaling processor that is configured to receive and process signaling to select a connection, a bandwidth rate, and an encoding scheme.

With respect to the bandwidth rate, Kalmanek teaches that the gate controller 110 sends a maximum bandwidth that may be requested through the gate (see column 35, lines 6 – 7) to the edge router (ER). The actual bandwidth used by the gate is determined by communications from the BTI to the ER (see column 28, lines 10 – 15). Claim 81 requires that the bandwidth rate used (not the maximum available) is sent from the signaling processor (not the BTI) to the interworking unit in the first message.

The examiner cites column 10 lines 13-20 showing that the network resources must verify the quality of service. The cited text relates to the maximum bandwidth allowable, not the actual bandwidth used. The cited text indicates that the network resources must verify that the “quality of service desired by a TIU is no greater than the QoS authorized...” (emphasis added). Clearly the cited text is once again limiting the maximum bandwidth allowable. The actual bandwidth used by the gate is determined by communications from the BTI to the ER (see column 28, lines 10 – 15). Thus, Kalmanek does not teach the claimed message between the signaling processor and the interworking unit to set the actual bandwidth used.

With respect the encoding scheme, Kalmanek teaches that the TIU selects the encoding scheme (CODING), and identifies the selected encoding scheme in the set-up message that it sends to the gate controller (See Kalmanek, column 21, line 1 to column 22, line 31). The gate controller does send the encoding scheme to the ER 120 but the ER doesn’t use the information “although the parameter includes the coding style, it is not used by the gate” (see column 35, lines 6 – 8). Claim 81 requires that the signaling processor selects the encoding scheme (not the TIU) and that the interworking unit “apply the encoding scheme to the user communications”.

The examiner states that he disagrees that Kalmanek teaches encoding scheme are selected and sent to the gate controller. The examiner then cites column 21 lines 60 – 62 as showing that the AUTHID message is sent. It’s true that the AUTHID message is sent from the OAMP system to the BTI, but it has nothing to do with selecting an encoding scheme. The AUTHID message is “the authorization code” (column 21 line 60), the CODING message gives the “single encapsulation and coding method” (column 22 line 50). Thus Kalmanek does not teach that the signaling processor is where the encoding scheme is selected and the interworking unit is where the encoding scheme is applied, as required by claim 81.

The prior art reference (or references when combined) must teach or suggest all the claim limitations. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Here, there are a number of elements in claim 81 (discussed above) that are not taught in Kalmanek, therefore the examiner has not fulfilled the requirements for a *prima facie* case of obviousness. Therefore claim 81 is allowable as written.

Claim 81 requires a signaling processor that is configured to transfer a message indicating the billing rate to an accounting system. In Kalmanek it's a two step process. The gate controller first sends a billing message to the edge router (See Kalmanek, column 33, line 55 to column 34, line 9). Then the edge router sends the billing information to the accounting system. (See Kalmanek, column 5, lines 9-28). Thus Kalmanek does not teach that the signaling processor send the billing rate to the accounting system.

"To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985). The examiner states that Kalmanek "fails to teach the billing rate transferring directly from the gate controller to the accounting system" (see page 3 of the current office action). The examiner then states it would have been obvious to modify Kalmanek to transmit the billing directly from the controller to the accounting system. The examiner does not "present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references" to support this statement. Therefore the examiner has not established a *prima facie* case of obviousness.

Because the examiner has not supported his modification to Kalmanek with a convincing line of reasoning, the applicant believes that the examiner has used unacceptable hindsight reasoning to modify Kalmanek.

Clearly, Kalmanek requires extremely intelligent TIUs (interworking units) to select connections, bandwidth rates, and coding schemes. This adds to the cost and complexity of the TIUs that must be present at each user site. Advantageously, the claimed invention greatly simplifies the TIU units of Kalmanek by placing intelligence in the signaling processor.

With respect to the dependent claims, the recent Office Action makes several incorrect assertions.

Claim 82 requires that the signaling processor process an SS7 message to make the selections. The recent Office Action cites column 7, line 61 in support, but that part of Kalmanek refers to a telephone gateway 130 that converts between SS7 signaling and the new signaling protocol described in Kalmanek that is processed by the gate controller. Thus, the telephone gateway 130 ensures that gate controller 110 gets the new signaling and never receives SS7 signaling.

Claims 83-84 require a signaling processor that is configured to select the bandwidth rate based on a caller number or whether the call is a voice call or a data call. The recent Office action cites Kalmanek column 9, lines 11-21 in support. The cited section does include the word "voice", but does not teach how the bandwidth rate is selected.

Claim 85 requires a signaling processor that is configured to select the encoding scheme based on a caller number. The recent Office action cites Kalmanek column 23, lines 28-32 in support. The cited section is not relevant to how the encoding scheme is selected.

Applicants submit that there are numerous additional reasons in support of patentability, but that such reasons are moot in light of the above remarks and are omitted in the interests of brevity. Applicants respectfully request allowance of claims 81-100.


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